



THIRD SPACE
LEARNING

6th Grade Indiana State Practice Math Test

Indiana Practice Test Grade 6

Grade 6

Questions

Name: Class:

Date: Score:

No Calculator For Questions 1 - 20



- 1 Jeremy works at a grocery store. He made 13.5 liters of soup. Jeremy will put the soup into containers of 0.75 liters to sell. How many containers can Jeremy fill completely with soup?

Write your answer in the box.

 Answer

- 2 What is the value of a ?



Write your answer in the box.

 Answer

3 Which expressions are equivalent to $8x + 28$? Select all the correct answers.

A. $8(x + 20)$

B. $7(x + 4) + x$

C. $8(x + 4) + 4$

D. $7(x + 3) + x$

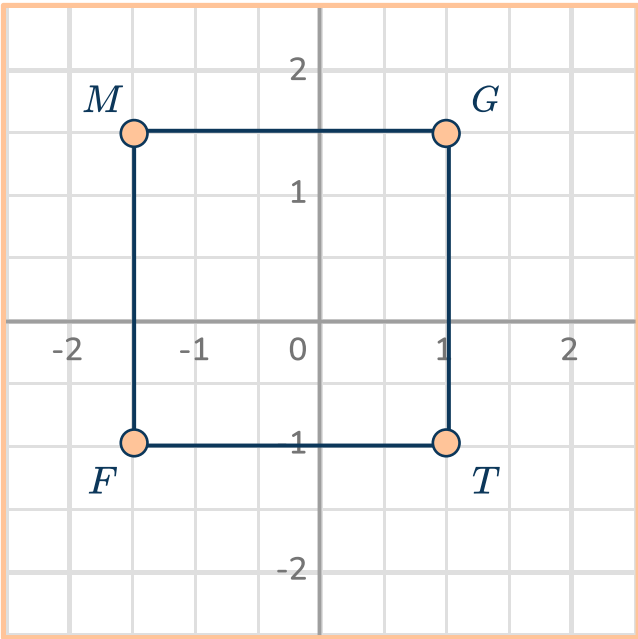
E. $2(x + 14) + 6x$

4 Solve the expression $6(5^2 - 3.5 + 2) \div \frac{1}{4}$.

Write your answer in the box.

 Answer

5 The coordinate grid shows square MGFT.



What is the perimeter, in units, of square MGFT?

Write your answer in the box.

Answer

- 6 Amir, Sofia and Gerard are playing a game.
- Gerard has 19 points
 - Sofia has the opposite of Gerard's points
 - Amir has -27 points

Write an inequality that compares the lowest number of points to the highest.

Write your answer in the box.

 Answer

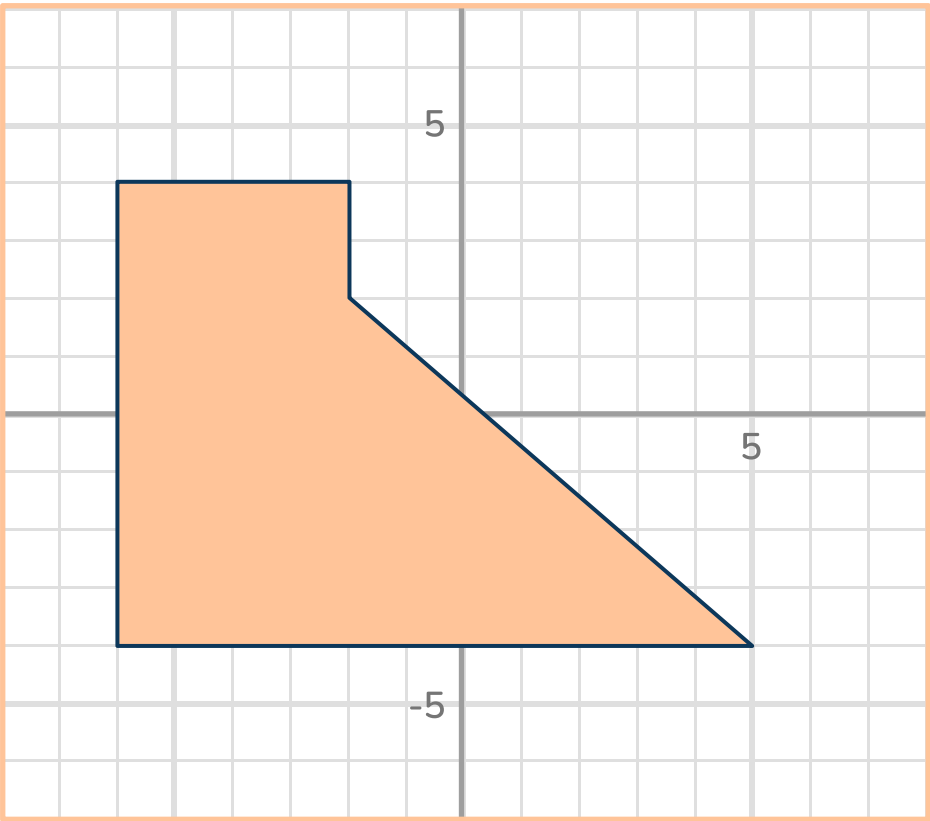
-
- 7 Malik needs at least 18 volunteers, v , for an event.

Write an inequality to show the number of volunteers, v , that Malik needs for the event.

Write your answer in the box.

 Answer

8 What is the area, in square units, of the shape shown?



Write your answer in the box.

 Answer

- 9 Show $8(5x + 9) + 2x$ as the sum of **two** terms.

Write your answer in the box.

 Answer

-
- 10 Write $4\frac{5}{8}$ as a decimal.

Write your answer in the box.

 Answer

11 $\frac{b}{3} = 48$
What value for b makes the equation true?

Write your answer in the box.

 Answer

12 If $x = 0.78$, decide whether each statement is true or false.

	True	False
$0.89 < x$	☐	☐
$x > \frac{2}{3}$	☐	☐
$x = 78\%$	☐	☐

- 13** Judy has 44.8 ounces of apple slices. Each bag holds 3.2 ounces of apple slices. How many bags, b , can Judy fill?

Equation:

 Answer

In the second box, write the number of bags represented by b .

Number of bags:

 Answer

14 There are four points on the number line.



Decide whether each statement is true or false.

	True	False
The value of Point C is greater than the value of Point A.	☐	☐
Point C and Point D are opposites.	☐	☐
The value of Point B is $-\frac{2}{3}$.	☐	☐

15 $0.8b = 7.6$
What is the value of b ?

Write your answer in the box.

Answer

16 $1.008 < m$

Decide whether each value for m makes the inequality true or false.

	True	False
1.06	☐	☐
$1\frac{1}{10}$	☐	☐
1.0009	☐	☐

17 Estelle is six years older than her brother Dorian. Which equation(s) show the relationship between Estelle’s age, e , and Dorian’s age, d . Select all the correct answers.

- A. $d - 6 = e$
- B. $d + 6 = e$
- C. $e - 6 = d$
- D. $e + d = 6$
- E. $e - d = 6$

Complete the statement:

If Estelle is 13 years old, then $d = \underline{\hspace{2cm}}$

- 18** Afonso and Kateryna are saving money. Afonso saves \$5 each week, w , and Kateryna saves \$8 each week, w .

In the first box, write an expression to show how much money Afonso and Kateryna have saved together after w weeks.

Expression:

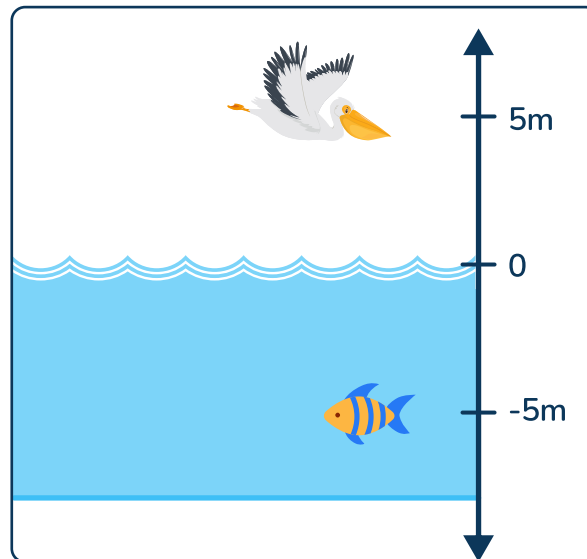
 Answer

In the second box, write the total Afonso and Kateryna save together after 6 weeks.

Total saved after 6 weeks:

 Answer

- 19 The diagram below shows the location of a pelican and fish in comparison to sea level.



Which statement is true?

- A. The pelican is $5m$ higher than the fish.
- B. The fish is $5m$ below sea level.
- C. The water temperature is -5 degrees.
- D. The sea level is at $-5m$.

-
- 20 Solve $5^4 = \underline{\hspace{2cm}}$

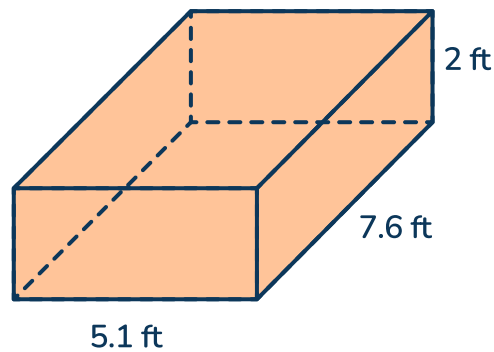
Write your answer in the box.

 Answer

Calculator Can Be Used For Questions 23 - 45



- 21 Calculate the volume of the rectangular prism, in cubic feet.



Write your answer in the box.

 Answer

- 22 The student council is selling tickets to the school dance for \$5. Dilara wrote the following equation: $5x = y$.

Which statements correctly describe Dilara's equation within the context?
Select **all** the correct answers.

- A. x is the price of one ticket
- B. y is the total dollars for x tickets sold
- C. 5 is the total number of tickets sold so far
- D. $5x$ is the ticket price multiplied by the tickets sold
- E. y has only one correct solution

23 The table shows how many ounces of water are filtered, y , after x minutes.

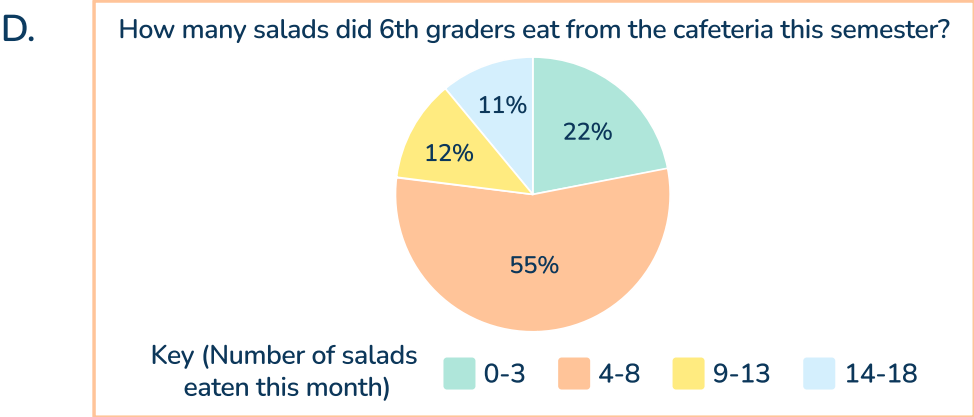
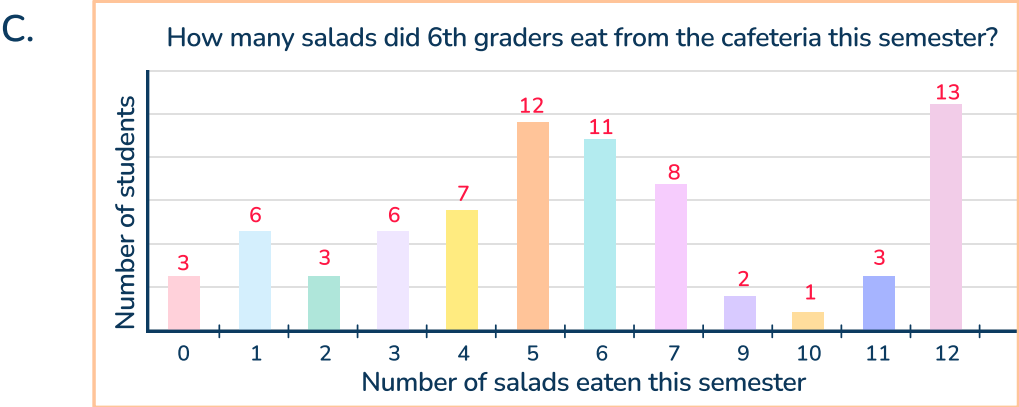
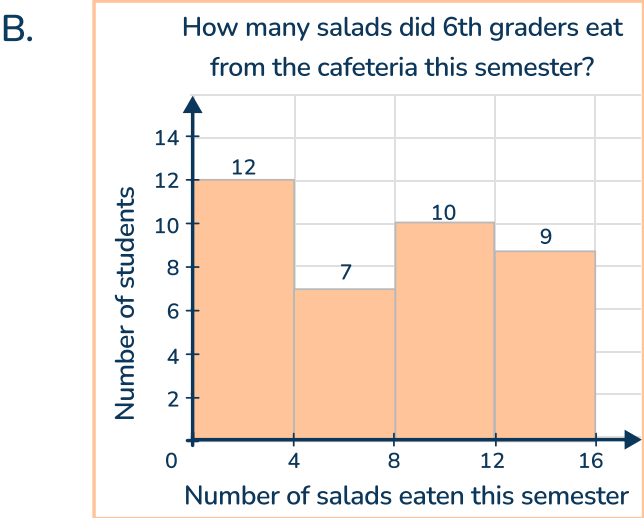
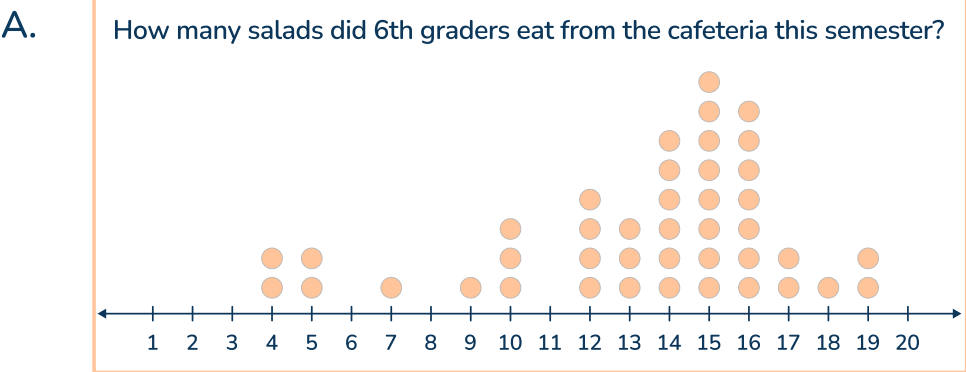
Water Filter	
Time (minutes)	Ounces filtered
2	62
4	124
7	217

Write an equation to show the relationship between x and y .

Write your answer in the box.

 Answer

24 Which graph supports the conclusion that “most 6th graders ordered 12 or more salads this month.”



25 The relationship between strawberries and blueberries in a smoothie is shown in the table. Fill in the missing values.

Strawberries (cups)	Blueberries (cups)
3	21
—	49
8	56
11	—

26 Chantal walks 2.4 miles in 40 minutes. How far does Chantal walk in 50 minutes?

Write your answer in the box.

 Answer

27 Mia is packing a box with books. The box has a length of 10 inches and a width of 8.5 inches. She knows the volume of the box is 595 cubic inches. What is the height of the box, in inches?

Write your answer in the box.

 Answer

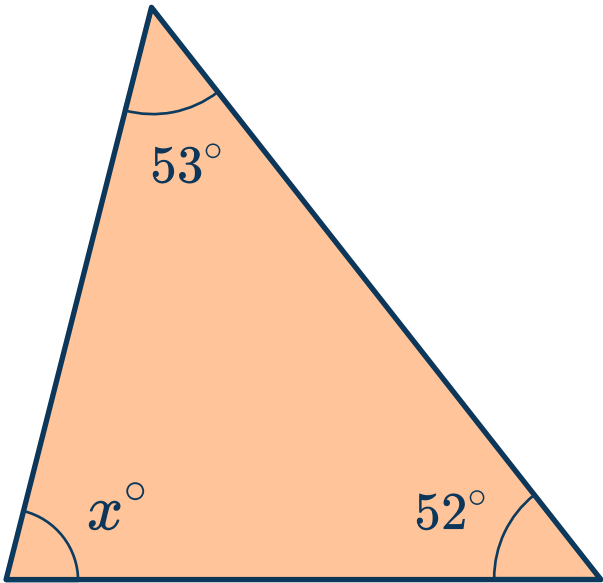
28 Below are the total scores for the first 9 games Otto’s baseball team played.

Total score: 4, 9, 2, 2, 8, 3, 7, 7, 12.

Decide whether each statement about the 10th game is true or false.

	True	False
A total score of 7 in the 10th game will increase mean.	☐	☐
A total score of 11 in the 10th game will increase median.	☐	☐
A total score of 13 in the 10th game will increase range.	☐	☐

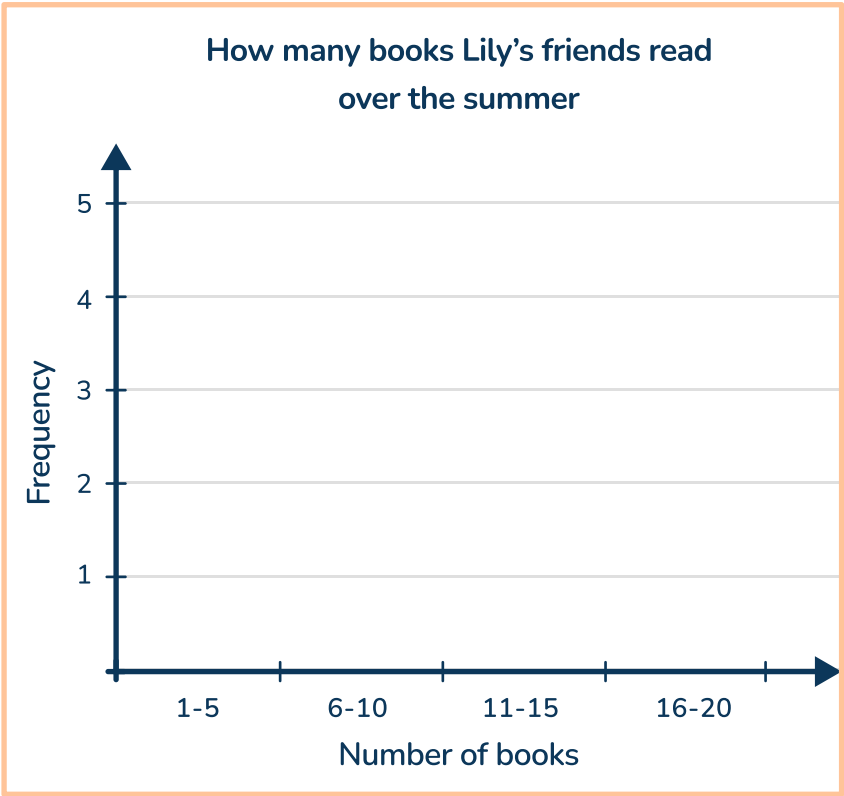
29 What does the missing angle measure, in degrees?



30 Lily asked 12 friends how many books they read over the summer. The data is in the list below.

3, 7, 15, 7, 9, 20, 5, 3, 12, 18, 9, 10

Complete the histogram below to show the data.



31 It takes 5 hours for Josef to plant 18 trees. At this rate, how many hours will it take Josef to plant 144 trees?

Write your answer in the box.

 Answer

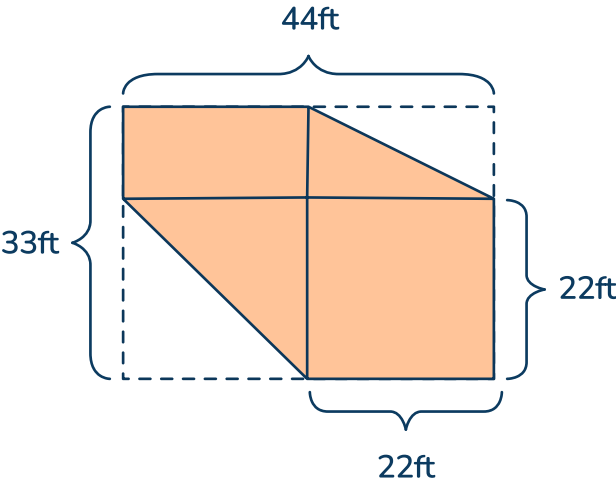
32



Which statements are true about the data shown in the histogram above?
Select all the correct answers.

- A. The graph includes data points for 22 people.
- B. The largest shoe size is 12.
- C. Only whole number shoe sizes were collected.
- D. The data is centered around the bin with the median.
- E. The data is not symmetrical.

33



What is the area of the figure above, in square feet?

Write your answer in the box.

 Answer

Answer Key

Item number	Correct answer	Standard(s)	DOK								
1	18	6.NS.4	DOK 2								
2	−0.5	6.NS.3	DOK 1								
3	B, E	6.NS.7	DOK 1								
4	564	6.NS.5	DOK 1								
5	10	6.AF.5(E)	DOK 2								
6	$-27 < 19$ or $19 > -27$	6.NS.1	DOK 2								
7	$v \geq 18$ or $18 \leq v$	6.AF.4	DOK 2								
8	53	6.AF.5, 6.GM.3	DOK 2								
9	$42x + 72$	6.NS.7	DOK 1								
10	4.625	6.RP.1	DOK 1								
11	144	6.AF.3	DOK 1								
12	<table><tr><th>True</th><th>False</th></tr><tr><td>☐</td><td>☒</td></tr><tr><td>☒</td><td>☐</td></tr><tr><td>☒</td><td>☐</td></tr></table>	True	False	☐	☒	☒	☐	☒	☐	6.RP.1	DOK 1
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13	$44.8 \div 3.2 = b$ OR $3.2b = 44.8$ $b = 14$	6.AF.3	DOK 2								
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Indiana State Practice Math Test | Grade 6 | Answers

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15	9.5	6.AF.3	DOK 1												
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20	625	6.NS.8	DOK 1												
21	77.52	6.GM.4	DOK 1												
22	B, D	6.RP.5	DOK 2												
23	$y = 31x$	6.RP.5	DOK 2												
24	A	6.DS.3	DOK 2												
25	7 and 77	6.RP.3	DOK 2												
26	3	6.RP.4	DOK 2												
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31	40	6.RP.4	DOK 2
32	A, D	6.DS.3	DOK 2
33	1,089	6.GM.3	DOK 2

ANSWERS SORTED BY REPORTING CATEGORY

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Do you have a group of students who need a boost in math?

Each student could receive a personalized lesson every week from our specialist one-on-one math tutors.

- ✓ Differentiated instruction for each student
- ✓ Aligned to your state's standard
- ✓ Scaffolded learning to close gaps

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